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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,192	04/02/2004	Gi-joong Jeong	Q80883	7520

23373 7590 04/13/2007  
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 WASHINGTON, DC 20037

EXAMINER
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ING, MATTHEW W

ART UNIT	PAPER NUMBER
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3637

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/13/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/816,192

Applicant(s)

JEONG ET AL.

Examiner

Matthew W. Ing

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 5-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 5-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 14 March 2007 has been entered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Regarding claim 15, the term "the bending portion" in line 1 lacks antecedent basis in the claim.

### ***Claim Rejections - 35 USC § 103***

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lye (6,227,636) in view of Vardon (2002/0190620), Avendano (5,947,574), and Herrmann (5,524,981).

7. Lye teaches the structure substantially as claimed, including a main body (2) formed with

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a storage compartment (6), wherein said storage compartment has a plurality of interval adjusting holes (45) disposed at a side of an inner wall; a door (7) hingedly connected to the main body; at least one shelf (25) provided inside said storage compartment (see Figure 1), said shelf having a hook portion (38) selectively coupled to one of the plurality of the interval adjusting holes.

8. The only difference between Lye and the invention as claimed is that Lye fails to teach a shelf structure comprising: a horizontal glass; a glass supporter coupled to edges of the glass, the glass supporter comprising: a first side surface and a second side surface; a first coupling portion and a second coupling portion, the first and the second coupling portions respectively extending downward from the first and the second side surfaces; a first bracket coupled to the first coupling portion of the glass supporter and attached onto a wall of the storage compartment; and a second bracket coupled to the second coupling portion of the glass supporter and attached onto the wall of the storage compartment; wherein the first bracket is disposed under the first side surface of the glass supporter and the first side surface of the glass supporter and an exterior side surface of the first bracket form a substantially flush vertical exterior side surface; wherein the first and the second brackets and the glass form an interior area and the first and the second brackets are not disposed in the interior area.

9. Vardon, however, teaches a shelf structure comprising a horizontal glass (1); a glass supporter (2) coupled to edges of the glass, said glass supporter comprising a first side surface and second side surface (5); a first coupling portion and a second coupling portion (7) extending downward from, respectively, the first and second side surfaces (5). Additionally, Avendano teaches a first coupling portion and a second coupling portion (16, 17) forming first and second cavities (see Figures 1 & 2), respectively.

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10. Additionally, Herrmann teaches first and second brackets (316) coupled, respectively, to the first and second coupling portions (318) of a glass supporter (i.e., the combination of Items 318 & 224), and capable of being attached onto a wall of the storage compartment; wherein the first bracket (316) is disposed under the first side surface of the glass supporter (see Figure 5); wherein a first side surface (318 & 224) of the glass supporter and an exterior side surface of the first bracket (316) form a substantially flush vertical exterior side surface (see Figure 5); wherein the first and the second coupling portions (318) and the glass (22) form an interior area and the first and second brackets (316) are not disposed in said interior area; wherein the glass supporter (318 & 224) is disposed between the first & second brackets (316); wherein said brackets (318) each comprise a hook portion selectively coupled to at least one of a plurality of interval adjusting holes (see Figures 1, 6, & 7).

11. It would have been obvious to one of ordinary skill in the art to replace the shelf structure of Lye with the shelf structure of Vardon in order to provide the user with shelves that are hygienic, lightweight, and easily cleanable; to replace the coupling portions of the shelf of Vardon with the coupling portions taught by Avendano in order to provide added structural reinforcement to said shelves; and to replace the brackets of the shelf of Vardon with the brackets taught by Herrmann in order to improve the aesthetic appearance of said shelves, thereby providing the structure substantially as claimed.

12. Claims 1, 2, 6-8, 11, 12, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lye (6,227,636), Vardon (2002/0190620), Avendano (5,947,574), and Herrmann (5,524,981) as applied to the claims, further in view of Schiedegger (2002/0043190).

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13. Lye, Vardon, Avendano, and Herrmann teach the structure substantially as claimed, including first & second brackets; and first & second coupling portions with first & second cavities (see Figures 1 & 2 of Avendano); wherein the first & second coupling portions and the glass form a first area and the first & second brackets are not disposed in the first area; the only difference being, Lye, Vardon, Avendano, and Herrmann fail to teach first & second pluralities of coupling bosses located within said first & second cavities; first & second brackets including first & second pluralities of holes aligned with said first & second pluralities of coupling bosses.

14. Schiedegger, however, teaches a plurality of holes (102), and screws (see paragraph 26, line 5) located on a shelf structure (54); said screws being obviously horizontally disposed through said holes; and a plurality of coupling bosses (62) located within cavities upon support structures (14) for said shelves. See Figures 4 & 5.

15. Whereas mere reversal of the essential working parts of a device has been held to involve only routine skill in the art, it therefore would have been obvious to one of ordinary skill in the art to include the coupling bosses of Schiedegger within the first & second cavities of the coupling members of the shelf structure of Lye as modified by Vardon, Avendano, and Herrmann, and the holes & screws of Schiedegger upon the first & second brackets of the shelf structure of Lye as modified by Vardon, Avendano, and Herrmann, in order to increase the structural rigidity of the connections between the brackets and the coupling members, thereby providing the structure substantially as claimed.

16. Regarding claim 6, the shelf structure of Lye as modified by Vardon, Avendano, Schiedegger, and Herrmann teaches ribs (see Figure 1 of Avendano) projecting towards the first & second brackets.

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17. Regarding claim 7, the shelf structure of Lye as modified by Vardon, Avendano, Schiedegger, and Herrmann teaches a storage compartment (Item 6 of Lye), wherein said storage compartment has a plurality of interval adjusting holes (45) disposed at a side of an inner wall; and brackets (Item 316 of Herrmann) each comprising a hook portion selectively coupled to at least one of a plurality of interval adjusting holes (see Figures 1, 6, & 7).

18. Regarding claims 8, 17, and 18, the shelf structure of Lye as modified by Vardon, Avendano, Schiedegger, and Herrmann teaches a pair of brackets (Item 316 of Herrmann) disposed between an adjacent one of two walls of a storage compartment (Item 6 of Lye) and a glass supporter.

19. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lye (6,227,636), Vardon (2002/0190620), Avendano (5,947,574), Herrmann (5,524,981), and Schiedegger (2002/0043190) as applied to the claims, further in view of Swain (2002/0113189). Lye, Vardon, Avendano, Schiedegger, and Herrmann teach the structure substantially as claimed, including a plurality of ribs (see Figure 1 of Avendano) and a first plurality of coupling bosses; the only difference being, Lye, Vardon, Avendano, Schiedegger, and Herrmann fail to explicitly teach a plurality of ribs interdisposed among the first plurality of coupling bosses. Swain, however, teaches a plurality of ribs (44) interdisposed among the first plurality of coupling bosses (68). It would have been obvious to one of ordinary skill in the art to include, as taught by Swain, a plurality of ribs interdisposed among the first & second pluralities of coupling bosses in the shelf structure of Lye as modified by Vardon, Avendano, Schiedegger, and Herrmann, in order to provide increased structural support for said shelf structure, thereby providing the structure substantially as claimed.

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20. Claims 5, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lye (6,227,636), Vardon (2002/0190620), Avendano (5,947,574), Herrmann (5,524,981), Schiedegger (2002/0043190), and Swain (2002/0113189) as applied to the claims, further in view of Lin (6,267,065).

21. Lye, Vardon, Avendano, Schiedegger, Swain, and Herrmann teach the structure substantially as claimed, including a plurality of ribs, and a horizontal bending portion (Item 226 of Herrmann) on each of the first & second brackets; the only difference being, Lye, Vardon, Avendano, Schiedegger, Swain, and Herrmann fail to teach a structure wherein each of the plurality of ribs includes a notch at a top edge, the notches of the plurality of ribs receiving a horizontal bending portion of the first bracket; and wherein the bending portion comprises a plurality of grooves and each of the plurality of supporting ribs fits into a corresponding one of the plurality of grooves.

22. Lin, however, teaches a structure wherein each of a plurality of ribs includes a notch (233, 243) at a top edge, the notches (233, 243) of the plurality of ribs receiving a horizontal bending portion (14); and wherein the bending portion (14) comprises a plurality of grooves (141, 142) and each of the plurality of supporting ribs fits into a corresponding one of the plurality of grooves (see Figure 5).

23. It would have been obvious to one of ordinary skill in the art to include notches and grooves, respectively, in the ribs and horizontal bending portions of the shelf structure of Lye as modified by Vardon, Avendano, Schiedegger, Swain, and Herrmann, in order to increase the structural rigidity of the connections between the brackets and the coupling members, thereby providing the structure substantially as claimed.



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***Response to Arguments***

24. Applicant's arguments filed 14 March 2007 have been fully considered but they are not persuasive.

25. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.


***Conclusion***

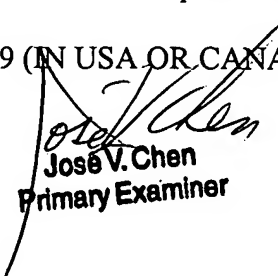
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew W. Ing whose telephone number is (571) 272-6536.

The examiner can normally be reached on Monday through Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (571) 272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MWI   
15 March 2007

  
José V. Chen  
Primary Examiner